

Colleges and Universities

Arizona State University

Tempe, AZ

Academic Reputation Score = 3.3

Demographics

Population	35,938
Hispanic	10.2%
Asian	4.4%
African American	2.9%
Female	50.6%

Engineering (<http://www.eas.asu.edu/>)

Electrical: Department conducts research and instructional programs in five main areas: solid state electronics, power, electromagnetics, signal processing and communications systems, and systems and controls. Offers an ABET accredited BSE, MSE without a thesis, an MS with a thesis, and a Ph.D. with a dissertation. Has over 750 enrolled undergraduate students and over 450 enrolled graduate students.

Civil: Department offers study area including structural, geotechnical, environmental and water resources, transportation and materials engineering. Civil Engineering program is ABET accredited. Students will be prepared for the Fundamentals of Engineering (FE) examination and, with experience, professional registration.

Mechanical: Department of Mechanical and Aerospace Engineering (MAE) is dedicated to continued development of excellence in its research and teaching programs. Research in certain areas of design and manufacturing, fluid mechanics, heat transfer, mechanics and materials, and system dynamics and control receives international recognition. Publications and extramural funding levels continue to accelerate. Innovative teaching and design methods are also featured. Department offers BS, MS, MSE, and Ph.D. in Aerospace Engineering and Mechanical Engineering. Undergraduate programs are ABET accredited

California State University, Los Angeles

Los Angeles, CA

Academic Reputation Score = 2.8

Demographics

Population	15,448
Hispanic	43.5%
Asian	25.3%
African American	9%
Female	59.4%

Engineering (<http://www.calstatela.edu/academic/engr/tmp/et/index.htm>)

Bachelor's of Science degrees in Electrical Engineering, Civil Engineering, and Mechanical Engineering are offered. Review the website for specific course description and faculty information.

Oregon State University

Corvallis, OR

Academic Reputation Score = 2.9

Demographics

Population	13,251
Hispanic	18%
Asian	8.5%
African American	1.3%
Female	45%

Engineering (<http://www.engr.orst.edu/>)

Electrical: Curriculum meets requirements for professional engineering degree and is accredited by ABET. Undergraduates may elect courses in science or engineering during sophomore, junior, and senior years to prepare for graduate work or to form a broad undergraduate program. Many courses allow students to work in well-equipped laboratories, providing direct experience with analog, digital, and hybrid computers, design and manufacture of integrated circuits, and a variety of electronic and electrical engineering equipment.

Civil: Curriculum is designed to prepare students for professional and responsible engineering positions with business, industry, consulting firms, or government. Curriculum includes basic sciences, social sciences, humanities, communication skills, engineering sciences, and engineering design.

Mechanical: Curriculum is broad in scope with course work and project activities in several areas. By proper choice of electives, students may achieve a degree of specialization and depth. The areas include applied stress analysis; design and analysis of mechanical and thermal/fluid systems; concurrent design; dynamics; heat transfer; fluid dynamics; metallurgy and materials; and energy system design.

Portland State University

Portland, OR

Academic Reputation Score = 2.5

Demographics

Population	11,060
Hispanic	2.6%
Asian	7.6%
African American	2.2%
Female	51.9%

Engineering (<http://www.eas.pdx.edu/>)

Electrical: ABET-accredited program in electrical engineering and computer engineering program provide necessary background for employment and graduate study. Specialization areas include physical electronics, electrical power engineering, automatic control systems, communication systems, optical electronics, electromagnetics, analog and digital electronics, VLSI circuit design, computer architecture, microprocessor system design, and neural networks.

Civil: Goals are to provide high-quality undergraduate and graduate courses to prepare students for practice in government, industry, and private consulting; provide a well-rounded education in major discipline areas of civil engineering; allow students to select one or more major discipline areas for specialization; maintain an overall emphasis on design; and foster interaction with the local industrial community. Modern laboratories and computing facilities are available for students in the program. These include the Seismic Testing and Applied Research (STAR) Lab, computer-aided design (CAD) labs, and structures, geotechnical, hydraulics and transportation labs. Accredited by EAC/ABET.

Mechanical: Undergraduate program at Portland State University is ABET accredited and maintains close ties with regional industry. BSME includes broad base in fundamentals of thermal/fluid sciences, machine component analysis, and dynamic system modeling; highly successful senior design sequence that embraces these fundamentals and provides students with a realistic industrial experience in a team setting; specialization in two areas, thermal system design and mechanical system design.

San Diego State University

San Diego, CA

Academic Reputation Score = 2.6

Demographics

Population	29,331
Hispanic	20%
Asian	15%
African American	6%
Female	55.4%

University of Arizona

Tucson, AZ

Academic Reputation Score = 3.6

Demographics

Population	30,620
Hispanic	15%
Asian	6%
African American	3%
Female	51%

Engineering

Electrical: (<http://www.ece.arizona.edu/>) Electrical and Computer Engineering Department (ECE) conducts research and instructional programs ranging from electromagnetic scattering to communications and information processing, from semiconductor electronics to computer engineering, and from circuits to signal processing and image analysis. This dynamic program of teaching, research, and service has earned a distinguished national reputation. Department offers BS in electrical engineering, computer engineering, and optical engineering; and MS and Ph.D. in electrical and computer engineering. Department ranked as one of the top 20 among public institutions in the US, and in top 10% of ECE departments in all US colleges and universities. Research funding in previous years amounted to over \$5.2 million/year. There are currently 805 undergraduate students and 207 graduate students enrolled in the department.

Civil: (<http://w3.arizona.edu/%7Ecivil/>) Department Civil Engineering and Engineering Mechanics currently has 13 tenure track faculty, as well as 2 non-tenure track faculty members, 227 undergraduate students and 40 graduate students. The ranks of faculty range from assistant professor to Regent's Professor. Also have two members of the National Academy of Engineering, including the President of the University assigned to faculty.

University of New Mexico

Albuquerque, NM

Academic Reputation Score = 3.0

Demographics

Population	17,887
Hispanic	28.9%
Asian	3.2%
African American	2.7%
Female	55.7%

Engineering (<http://www.cs.unm.edu/soe/>)

Electrical: Program is divided into several areas of concentration: electronics, microelectronics, optoelectronics, computers and digital systems, networks and control systems, power systems, and signal processing and communications. BS in electrical engineering is the basic degree offered and is accredited ABET.

Civil: Department faculty have graduate degrees, principally doctorates, from prominent universities throughout the country. All are registered professional engineers and many have had civil engineering experience with industry or governmental agencies. Faculty are dedicated to high-quality teaching and several have won teaching awards. To maintain currency in their technical fields, most faculty conduct sponsored research; many of these projects provide employment opportunities for students. Because the department is relatively small, students have opportunities to interact with faculty in the classroom and the laboratories. Faculty are committed to enhancing the learning experience for students and are available to work individually with them to provide help and counsel.

Mechanical: Department offers BS, MS, and Ph.D. degrees in Mechanical Engineering. Bachelor of Science degree in Mechanical Engineering is ABET accredited.

University of Portland

Portland, OR

Academic Reputation Score = 3.4

Demographics

Population	2,196
Hispanic	2.4%
Asian	5%
African American	1.3%
Female	55.5%

Engineering (<http://www.up.edu/academics/engineering/default.html>)

The School of Engineering offers undergraduate and graduate degree programs. Four-year bachelor of science degrees in civil engineering (BSCE), electrical engineering (BSEE), and mechanical engineering (BSME), and engineering management (BSEM). Students may opt for a "computer track," and beginning with sophomores in 1999, the Department of Civil Engineering will offer an "environmental track." In undergraduate studies, curriculum progresses from mathematics and science in the 1st year to engineering science in the sophomore year. Junior and senior year studies concentrate on analysis, design, and synthesis aspects of topics learned in the first 2 years. Capstone design projects are in the senior year in civil, electrical, and mechanical engineering. Students embark on in-depth study of a particular device, structure, or system and design it from the ground up.

University of Washington

Seattle, WA

Academic Reputation Score = 4.0

Demographics

Population	32,584
Hispanic	3.8%
Asian	22.1%
African American	3.4%
Female	50.5%

Engineering (<http://www.engr.washington.edu/>)

Electrical: Undergraduate program admits approximately 160 students per year, with average freshman/sophomore GPA of 3.5. Curriculum is ABET-accredited and combines strength in electrical engineering fundamentals with extensive laboratory experience and an environment that stresses leadership, teamwork, and creativity. Department has focused program of ongoing improvement of undergraduate education. This includes curriculum revision for the core classes, new laboratories, and new courses funded by NSF in photonics and consumer electronics. In 1996 founded an undergraduate tutorial center to provide senior peer help for all undergraduate courses.

Civil: (<http://www.ce.washington.edu/welcome.htm>) Department offers coursework and graduate programs in all Civil and Environmental Engineering subdisciplines including construction engineering, environmental engineering and science, geotechnical engineering, hydraulics systems, structural engineering, transportation engineering and water resources. Department has over 30 faculty with outstanding international reputations in teaching and research. Department's faculty has written papers that have been cited over 5,000 times since 1990. Undergraduate program consistently ranks among nation's top 12 Civil and Environment Engineering programs. Graduate program ranked 13th in 1998. Committed to improvement and continue to implement Strategic Plan to enhance effectiveness of instructional, research, and service missions.

Mechanical: (<http://www.me.washington.edu/>) Mechanical Engineering degrees offered. Refer to website for details.

Washington State University

Pullman, WA

Academic Reputation Score = 3.1

Demographics

Population	19,884
Hispanic	3.3%
Asian	5.3%
African American	2.2%
Female	47.9%

Engineering (<http://www.cea.wsu.edu/undergrad/>)

Electrical: Offers degrees of Bachelor of Science in Electrical Engineering (BSEE), Computer Science (BSCS), or Computer Engineering (BSCptE), and Master of Science in Electrical Engineering (MSEE) or Computer Science (MSCS), and Doctor of Philosophy. BSEE program is accredited by Engineering Accreditation Commission of the Accreditation Board of Engineering and Technology (EAC of ABET); program leading to the BSCS is accredited by the Computer Science Accreditation Commission of the Computing Sciences Accreditation Board (CSAC of CSAB). Curriculum is oriented toward basic theory and concepts which prepare students for entry into research, design, development, operations, management, teaching, sales, and consulting. Laboratory experience is emphasized to provide familiarity with electrical, electronic, and computing equipment and with experimental techniques. Modern laboratories are available for electrical circuits, electronics, power systems, electromagnetics, measurements, digital microtechnology, systems and computers. Curriculum is designed so that equivalent of the first 3-4 semesters may be transferred from community colleges with minimal difficulty. Additional basic material is concentrated in the junior year, and maximum flexibility permitted in the senior year, allowing the student to develop a breadth of interest or select an area of specialty.

Civil: BS in Civil Engineering is ABET accredited. Objective of program in civil and environmental engineering is to give thorough training in fundamental engineering principles with intensive introduction to each of the specializations within civil engineering. Program includes opportunity to develop emphasis in specialty areas of environmental, hydraulics, geotechnical/transportation, and structural. Student's program is tailored to meet needs and interest of the student. Curriculum emphasizes a combination of classroom and lab education with computer-aided design and analysis. The department maintains a microcomputer lab.

Mechanical: Curriculum emphasizes foundation courses at the third year, emphasizes analysis and design, and lab courses provide opportunities for hands-on experiences. Computer applications are interwoven. In the fourth year each student selects an emphasis area with 2 design-focused electives to build upon material from the foundation courses and to integrate across the emphasis area. Undergraduate program is completed with both a capstone project design course and a capstone lab course. An integrated BS/MS program facilitates the completion of a master's degree in one additional year beyond the bachelor's degree. Degrees of BS in Mechanical Engineering (ABET accredited), MS in Mechanical Engineering, and Ph.D. (Mechanical Engineering) and participates in the interdepartmental program leading to the degree Doctor of Philosophy (Engineering Science).